



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,493	06/06/2005	Angelo Bettinzoli	3687-114	4704
23117 7590 03/16/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
PEREIRO, JORGE ANDRES				
ART UNIT		PAPER NUMBER		
3743				
MAIL DATE		DELIVERY MODE		
03/16/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,493

Applicant(s)

BETTINZOLI, ANGELO

Examiner

JORGE PEREIRO

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

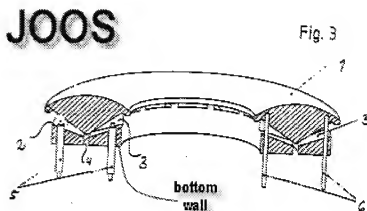
3. Claims 1-5 and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2001/0010897 to Dane (hereinafter "Dane") in view of German Patent No. DE 44 27 953 to Joos et al. (hereinafter "Joos").
4. In re Claims 1-5, 8-13 and 15, Dane discloses a gas burner for cookers, of the type fitted to a cooking hob, comprising a central body (1), having a first flame distribution ring (2), and at least one external body (3), fluidly separated from said central body and substantially concentric with it (*see at least* figures 1 and 2), having at least one second flame distribution ring (5), as well as means (10, 34) for separately feeding the mixture of primary air and gas to said central body and to said at least one external body (*see* paragraphs 0040-0042); further comprising one or more inlets (21) for the primary air (F) located above the cooking hob (P), and means of fluid

connection of said one or more primary air inlets with said means for separately feeding the mixture of primary air and gas to said central body and to said at least one external body (*see* paragraph 0058); wherein said means of fluid connection define a single circuit supplying primary air to said means for separately feeding the mixture of primary air and gas (*see* paragraph 0059); wherein said means for feeding said central body comprise a horizontal mixing chamber with a radial Venturi effect (*see* paragraph 0055); wherein said horizontal mixing chamber with a radial Venturi effect of said means for feeding said at least one external body and/or of said means for feeding the central body are obtained in said at least one external body and/or in said central body (*see* paragraph 0055); wherein said at least one second flame distribution ring comprises two concentric flame distribution rings (4, 5); further comprising a top covering element (36) of said central body, the upper wall of said at least one horizontal mixing chamber with a radial Venturi effect of the means for feeding the central body coinciding with a lower wall of said covering element (*see* paragraph 0055); wherein said means for separately feeding the mixture of primary air and gas to said central body and to said at least one external body are respectively actuated by separate taps (*see* paragraph 0039 and 0041); further comprising a duct (12) which is positioned upstream of the horizontal mixing chamber, which duct does not contribute to the radial Venturi effect.

5. However, Dane does not disclose wherein said means for feeding the at least one external body comprises at least one horizontal mixing chamber with a radial Venturi effect; wherein said horizontal mixing chamber is formed by top and bottom horizontal walls, the bottom wall having an inflow hole at a central portion thereof such that the primary air and the gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls; wherein said

means for feeding said at least one external body comprise two or more horizontal mixing chambers with a radial Venturi effect; further comprising a top covering element of said at least one external body, an upper wall of said at least one horizontal mixing chamber with a radial Venturi effect of the means for feeding said at least one external body coinciding with a lower wall of said covering element; wherein said at least one external body and said central body are made in a single piece.

6. Nonetheless, with reference to figure 3 below, Joos teaches a gas burner for a cooking hob wherein a means (4) for feeding at least one flame ring (see figure 3 below) comprises at least one horizontal mixing chamber (3) with a radial Venturi effect (*see at least* figures 3); wherein said horizontal mixing chamber is formed by top (see 1) and bottom (referenced in figure 3 below) horizontal walls, the bottom wall having an inflow hole (4) at a central portion thereof such that the primary air and the gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls; further comprising a top covering element (1) of said at least one external body, an upper wall of said at least one horizontal mixing chamber (3) with a radial Venturi effect of the means for feeding said at least one external body coinciding with a lower wall of said covering element.



7. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the external body of Dane wherein said means for feeding the at least one external body comprises at least one horizontal mixing chamber with a radial Venturi effect; wherein said horizontal mixing chamber is formed by top and bottom horizontal walls, the bottom wall having an inflow hole at a central portion thereof such that the primary air and the gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls; further comprising a top covering element of said at least one external body, an upper wall of said at least one horizontal mixing chamber with a radial Venturi effect of the means for feeding said at least one external body coinciding with a lower wall of said covering element as taught by Joos, since such a modification would provide a more thorough fuel/air mixture exiting said external body prior to combustion.

8. Regarding wherein said at least one external body and said central body are made in a single piece. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the external and central bodies of Dane wherein said at least one external body and said central body are made in a single piece, since it has been held that

forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1993).

9. In re Claims 14 and 16, Dane discloses a gas burner for cookers comprising a central body (1), having a first flame distribution ring (2), and at least one external body (3), fluidly separated from said central body and substantially concentric with it, having at least one second flame distribution ring (5), as well as at least one horizontal mixing chamber with a radial Venturi effect to separately feed the mixture of primary air and gas to said central body (*see* paragraph 0055); further comprising a duct (34) which is positioned upstream of the horizontal mixing chamber, which duct does not contribute to the radial Venturi effect; further comprising a duct (12) which is positioned upstream of a horizontal mixing chamber (22), which duct does not contribute to a radial Venturi effect.

10. However, Dane does not disclose at least one horizontal mixing chamber with a radial Venturi effect to separately feed the mixture of primary air and gas to said at least one external body; wherein said horizontal mixing chamber is formed by top and bottom horizontal walls, the bottom wall being having an inflow hole at a central portion thereof such that the primary air and gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls.

11. Nonetheless, with reference to figure 3 above, Joos teaches a gas burner for a cooking hob with at least one horizontal mixing chamber (3) with a radial Venturi effect (*see at least* figure 3) to separately feed the mixture of primary air and gas to at least one flame ring; wherein said horizontal mixing chamber is formed by top (*see* 1) and bottom (referenced in figure 3 above) horizontal walls, the bottom wall being having an inflow hole (4) at a central portion

thereof such that the primary air and gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls.

12. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the external body of Dane to comprise at least one horizontal mixing chamber with a radial Venturi effect to separately feed the mixture of primary air and gas to said at least one external body; wherein said horizontal mixing chamber is formed by top and bottom horizontal walls, the bottom wall being having an inflow hole at a central portion thereof such that the primary air and gas flow from the inflow hole radially and generally parallel to the top and bottom horizontal walls as taught by Joos, since such a modification would provide a more thorough fuel/air mixture exiting said external body prior to combustion.

13. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dane in view Joos as applied to claim 1 above, and further in view of French Patent FR 2,650,369 to Armanni et al. (hereinafter "Armanni").

14. In re Claims 6 and 7, Dane in view of Joos discloses all of the claim limitations except for wherein said means for feeding said at least one external body comprise two or more horizontal mixing chambers with a radial Venturi effect; and further comprising two or more external circumferential bodies, fluidly separated, each one of which comprises a horizontal mixing chamber with a radial Venturi effect.

15. Nonetheless, Armanni teaches a gas burner for a cooking hob comprising a central body (7) and two or more external circumferential bodies (5, 6), fluidly separated.

16. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Dane in view of Joos to divide said external body into

two or more external circumferential bodies, fluidly separated, as taught by Armani, since such a modification would provide added flexibility in the heat distribution and fuel consumption of said gas burner thus allowing more efficient heating of differing pan sizes than would be possible with a single external burner body and control.

Response to Arguments

17. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection. With regards to Applicant's argument that duct 12 of Dane "would thus not be upstream of the horizontal mixing chamber, as recited in claims 15 and 16" the Examiner respectfully reiterates that duct 12 is in fact upstream (*i.e.* in the opposite direction to the fuel/air flow) of the horizontal mixing chamber (as modified by Joos), and which does not contribute to the radial Venturi effect (*i.e.* duct 12 has a substantially constant cross-section).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see form PTO-892 (Notice of References Cited) attached to, or included with, this Office Action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE PEREIRO whose telephone number is (571) 270-3932. The examiner can normally be reached on Mon.-Fri. 9:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth B Rinehart/
Supervisory Patent Examiner, Art Unit 3743

Jorge Pereiro
Examiner
Art Unit 3743

